CI/CD Jenkins Task

Table of Contents

[Prerequisites 1](#__RefHeading___Toc2104_1045054329)

[Task 1](#__RefHeading___Toc2106_1045054329)

## Prerequisites

* Jenkins master
* Jenkins agent with Ubuntu 20.04

## Task

Need to create draft Jenkins Pipeline which does the build of source code by input Git Tag ($GIT\_TAG\_NAME), upload build artifacts to s3 ($S3\_PATH), then notification is sent to some email ($EMAIL\_LIST) in case of success/failure.

Source Code Build instruction was provided by Development team and located in the section below.

Pipeline draft should not be verified on real instance, draft skeleton of overall pipeline is enough (some details which can take time can be skipped).

## Build instruction

**Input Parameters:**

$GIT\_TAG\_NAME

$EMAIL\_LIST

$S3\_PATH

**Build steps (build steps were provided by development team):**

# Build should be done on Ubuntu 20.04.

# device\_source.tar.gz is available at Ubuntu home dir “~/device\_source.tar.gz”

# Setup tools from user home dir:

sudo apt-get install libxml2-utils curl gawk wget git-core gcc-multilib chrpath

sudo apt-get install build-essential

sudo apt-get install diffstat unzip texinfo

sudo add-apt-repository ppa:deadsnakes/ppa

sudo apt-get update

sudo apt-get install python3.7

sudo apt-get install -y python3-distutils

sudo ln -s /usr/bin/python3.7 /usr/bin/python

mkdir -p ~/.bin

PATH="${HOME}/.bin:${PATH}"

curl https://storage.googleapis.com/git-repo-downloads/repo > ~/.bin/repo

chmod a+rx ~/.bin/repo

# Getting Build environment:

mkdir test\_device\_build; cd test\_device\_build

# copy device\_source.tar.gz from initial location and extract

tar xvf device\_source.tar.gz

cd apps\_proc

repo init -u https://git.codelinaro.org/clo/le/le/manifest.git -b release -m LE.UM.6.3.6.r1-02300-SDX65.0.xml

repo sync

# Getting source code from bitbucket and then checkout input $GIT\_TAG\_NAME:

git clone git@bitbucket.org:<meta\_repo>.git poky/meta

git clone git@bitbucket.org:<source\_repo>.git src/vendor/some-company

# checkout the input Git Tag ($GIT\_TAG\_NAME)

<commands were not provided by develop team>

# Build procedure:

#there are 3 build variants: “dev”, “qa” and “prod”

# below there are build procedure for all 3 variants

# 1 - dev:

export MACHINE=sdxlemur

export DISTRO=qti-distro-nogplv3-debug

source poky/qti-conf/set\_bb\_env.sh

bitbake productdev -c clean

bitbake productdev

# 2 - qa:

export MACHINE=sdxlemur

export DISTRO=qti-distro-nogplv3-debug

source poky/qti-conf/set\_bb\_env.sh

bitbake productqa -c clean

bitbake productqa

# 3 - prod:

export MACHINE=sdxlemur

export DISTRO=qti-distro-nogplv3-debug

source poky/qti-conf/set\_bb\_env.sh

bitbake product -c clean

bitbake product

#Output files to be uploaded to s3:

dev: apps\_proc/build/dev\_1.0.0.ipk

qa: apps\_proc/build/qa\_1.0.0.ipk

prod: apps\_proc/build/prod\_1.0.0.ipk